

Welcome to the NOAA office in Woods Hole



Woods Hole, Massachusetts

Human Adaptations



Hair to keep heat



Eyebrows

Eyelashes

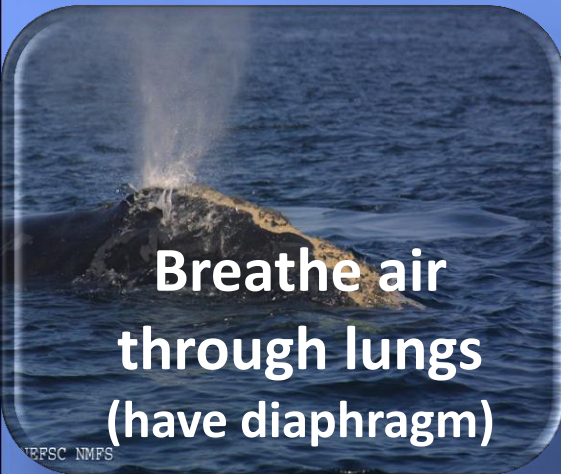


Pinkie toes

Opposable thumbs

Ears that stick out



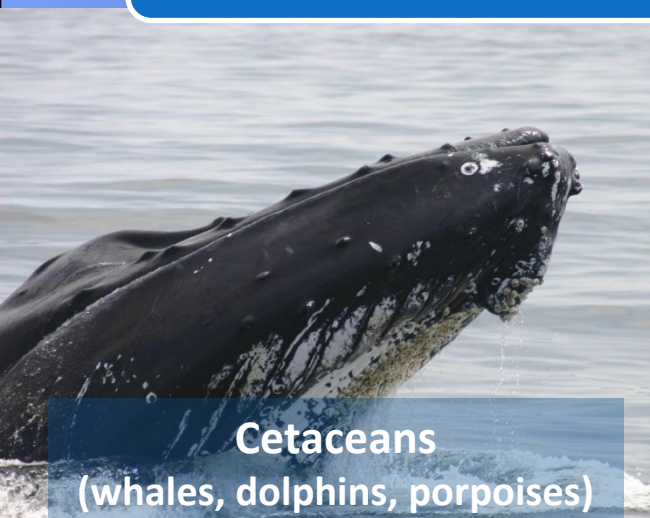


What is a mammal?

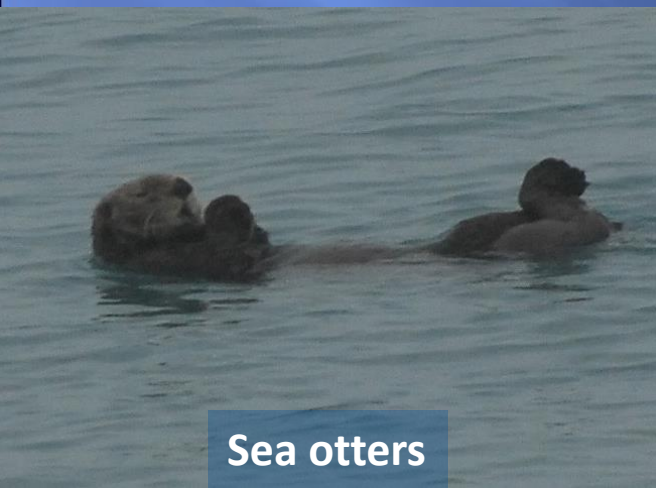


What is a marine mammal?

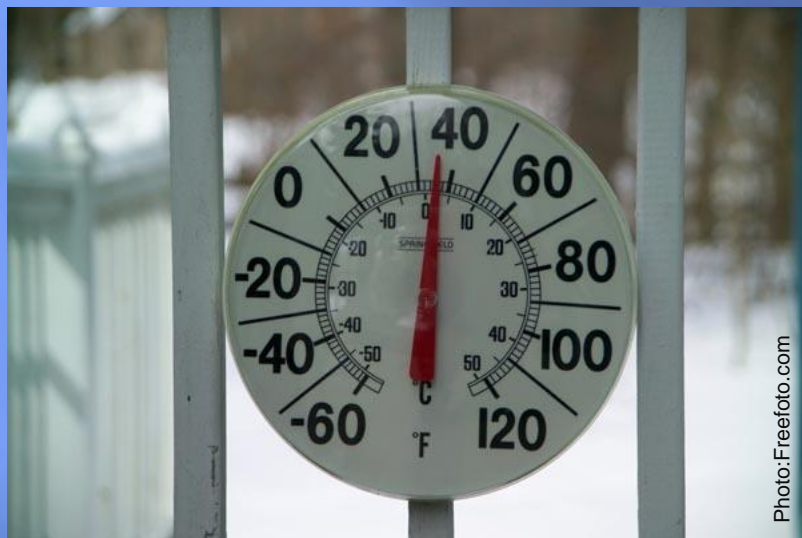
Mammals adapted for life in the marine environment



Sirenians
(manatees, dugongs)



Marine Habitat



Temperature?



Rough or Calm?



Dark or Light?

Marine Mammal Adaptations



Limbs evolved into fins & flippers

Deep diving adaptations

No outer ear flap

Feeding adaptations

Insulating blubber

Blowhole

Echolocation/Communication abilities

Streamlined bodies

Camouflage coloring
(dark top, light bottom)

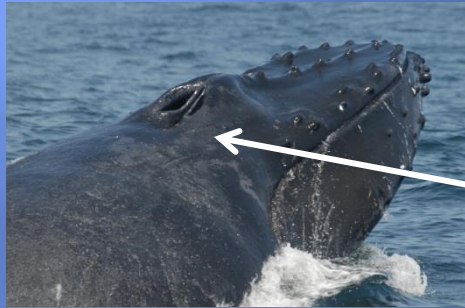
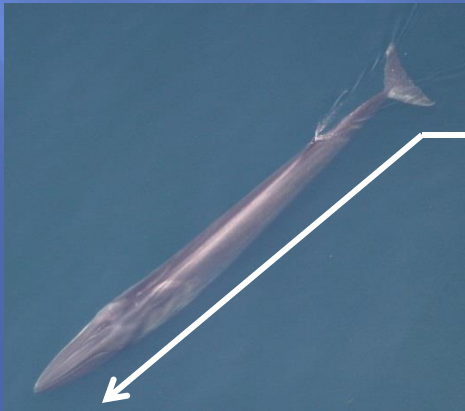


Photo: Ian Stirling



Adaptation Identification Review



Adaptation Identification Review



Photo Credit: Ian Stirling

Climate Change



Photo Credit: <http://earthgreen9.com/global-warming-climate-change/>

What is it?

The Heat Trapping Blanket

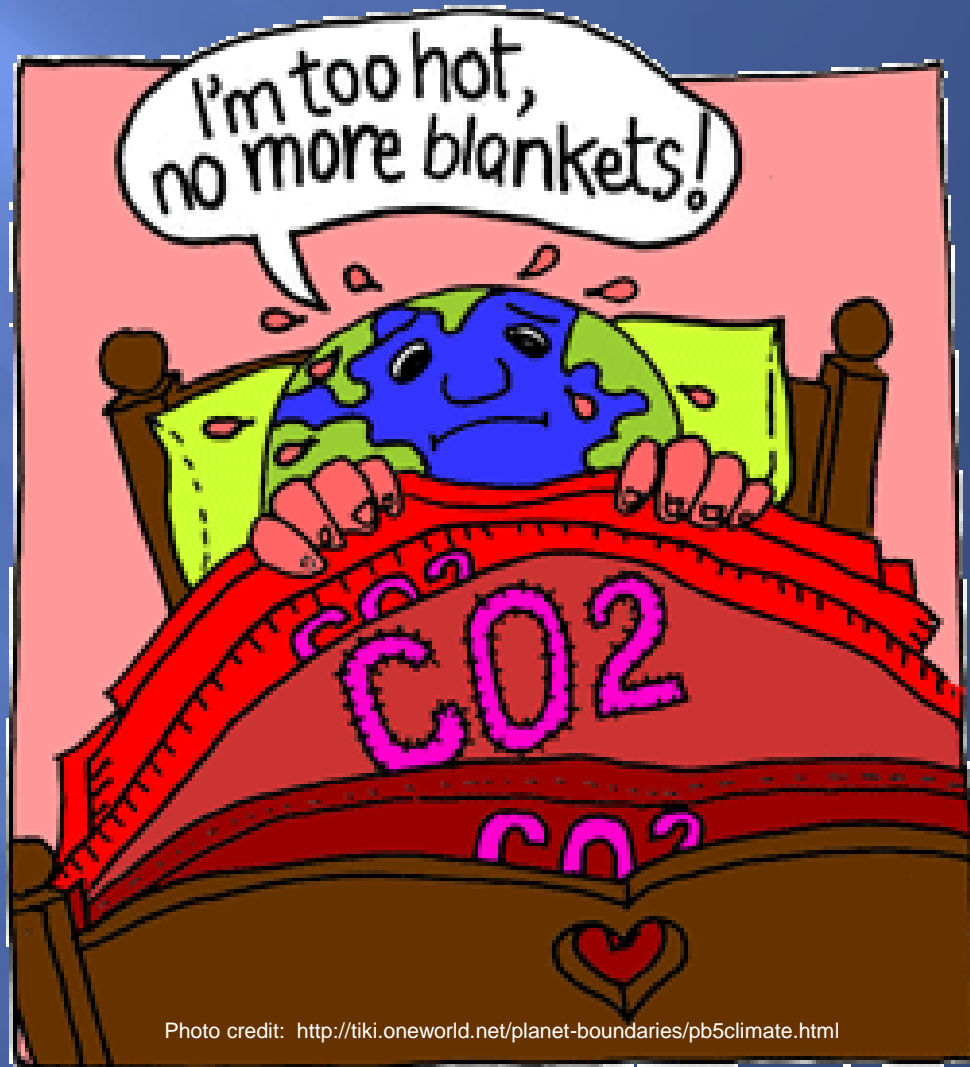


Photo credit: <http://tiki.oneworld.net/planet-boundaries/pb5climate.html>

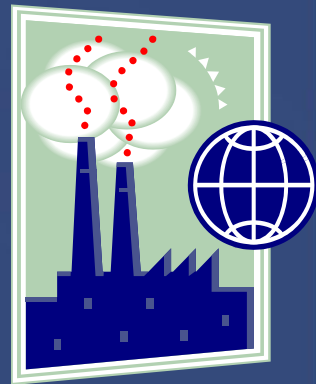


Photo credit: <http://devilsinquisitor.com/tag/heat/>

Heat Trapping Gases are produced by...



<http://www.carclipart.com/>



<http://www.designedtoat.com/summer2.shtml>



?

What does it mean for marine mammals?

As global temperature rises:

- sea temperature rises
- sea level rises
- icebergs melt

Results:

- Where animals live shifts
- Loss of habitat
- Change in where food is



Photo credit: Gordon Waring, NOAA/NEFSC

SCIENTIST SPOTLIGHT

Our very own PSB scientist...

Gordon Waring looks at Harbor and Gray Seals numbers and where they are located. He analyzes how they are using their habitat and how that habitat usage changes depending on the season (winter, spring, summer, and fall).



How can we help?

- ▣ Don't litter



- ▣ Recycle



- ▣ Buy eco-friendly products



- ▣ Conserve

Spread
the word

